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ABSTRACT

The objective of this study was to explicate the concept "involvement" so as to determine: (1) its range of meanings in both ordinary language and in the area of program development in adult education; and (2) how the range of meanings was used in empirical studies of a causal nature. The first task provided the basis for determining the internal validity of the concept (its meanings); the latter task, the external validity or relational character with other concepts. Linguistic analysis was used to provide a range of meanings in ordinary usage; then analysis was carried over to the uses of the concept in the professional literature of adult education. Secondly, the uses of the concept as found in empirical studies of the behavioral sciences were grouped according to common criterion variables and studied to determine the validity of common trends. Two major senses of involvement were isolated: the minimal sense--physical/cognitive activity--and a strong sense--an affective relationship. Findings revealed that minimal sense of the concept had been widely used in postulated hypotheses; supported the minimal sense of involvement as related to positive affective changes, desired behavioral changes, and certain ability changes; and did not support relationship between involvement (minimal sense) and greater acquisition of information. (author/pt)

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THE INTERNAL AND EXTERNAL VALIDATION OF THE CONCEPT INVOLVEMENT

BACKGROUND

In every form of research, certain theoretical considerations exist. The extent and explicitness of the theoretical foundations varies dependent on the area of study (the complexity of the phenomenon) and the range of concepts associated with that phenomenon.

One of the first steps then in the preparatory stage of empirical research is the analysis of the theory which exists, or the formulation of a workable theory, which underlies the phenomenon under study. Brodbeck (Gage, 1963), in her discussion of the development of knowledge indicates that in this phase of research two criteria are utilized. First, has the investigator identified the full range of variables which might influence the phenomenon; and second, has the investigator identified those variables which might be operative in a situation or varieties of situations. The latter consideration provides the basis on which a determination of the interactive character of several variables is made. The key element in this process is the identification of concepts as they relate to each other and the range of referents associated with each concept.

For example, the concept learning is not a unitary variable but possesses a range of referents. Investigators have identified broad types of learning, i.e., Gagne (1965). Educational philosophers such as Oakeshott,

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Dearden, and Vesey (Peters, 1967), have articulated differences between "learning to," "learning that," and "learning how to." Referents or indicators of the types of learning need to be analyzed to ensure that for a specific research problem, the meaning or meanings of the key concepts are explicit. This process then allows greater specificity to the operationalizing procedure for the study. Furthermore, by explicating the concepts or variables, the synthesis of the body of empirical data associated with the range of meanings of the concepts and their interrelationships is facilitated.

In a summary then, "good" empirical research is not only a function of research design, but is dependent on the clarity of the theoretical foundations from which that research flows. Concepts or variables are the building blocks of that theory, and the expansion of key concepts as to their meanings and possible referents is essential to greater understanding of interrelationships between the concepts and the operationalization of those concepts.

The concept <u>involvement</u> was selected as the focus of this analysis for several reasons. First, involvement has become an oft-espoused goal of our citizenry. It is current and relevant. Communities have been urged to become involved in solving their own problems. Students have and are demanding greater involvement in the policy-making and administration of educational programs directly affecting them. Young people are demanding more political involvement in the domestic andforeign affairs of many countries. Second, adult educators have long accepted the mandates of a democratic society to involve their clientele in programs directly related to the needs of that clientele, in conjunction with societal needs. The latter

consideration points up several crucial questions. Does involvement, per se, contribute to the objectives of the program? What type of involvement promotes what type achievement in program objectives? To what extent should adults be involved in the planning of programs? What form or forms will this involvement take? What does involvement really mean? These pragmatic inquiries underlay the study and provided the impetus for its undertaking.

ASSUMPTIONS

Four assumptions were identified in conjunction with this study.

1. Participant involvement in the program planning process in adult education is consistent with democratic principles and is currently operative.
2. Participant involvement has been linked to other concepts, i.e., learning, motivation, as a principle of action and research.
3. Ambiguity surrounds the meaning or meanings of the concept involvement and its relationships to other key concepts.
4. Research, whether theoretical or empirical, is a matter of clarity of central concepts and the interrelationships between these concepts.

RESEARCH OBJECTIVES

The objectives of this research were to explicate the concept involvement in such a manner to determine: 1) its range of meanings (how it is used) as found both in ordinary language and in a selected area of the literature of adult education (program development); and 2) how the range of meanings of the concept involvement was utilized in empirical studies of a causal nature, i.e., a trend analysis of relationships which included involvement and other variables. The findings of the first

task provided the basis for determining the internal consistency or content validity of the concept (its meaning(s); the findings of the latter task provided the basis for determining the verified relational character or the external validity of the concept as it relates to other concepts (its significance).

One word of clarification seems appropriate here. The terms "meaning" and "significance" are utilized in the sense stipulated by Brodbeck (Gage, 1963). A concept has "meaning" if it enables us "to know an instance of the defined concept when we see one." It is defined (either nominally or operationally) in terms of observable characteristics, its referents. A concept has "significance" if it "appears in a law (or a verified hypothesis) connecting it with other concepts." The concept has a validated relational character (over time) which allows for a certain degree of explanation and prediction.

An example might clarify the distinction made by Brodbeck. The concept "baldness" can be nominally or descriptively defined in several ways, i.e., the lack of hair on the head, or the presence of a large portion of unhairy skin in a specified region of the cranium. Generally speaking, most of us would agree that X individual or Y individual was or was not bald. The concept "baldness" would have "meaning." While this is an interesting fact, it is of itself, not very significant in terms of new knowledge. But if it were found through research that men possessing "baldness" were more intelligent or were more socially accepted, or were better lovers, then the concept <u>baldness</u> would allow us to make certain predictions as to behavior or performance. "Baldness" would then possess "significance."

RESEARCH PROCEDURE

The technique chosen to explicate the concept involvement was linguistic analysis. This procedure (many variations exist) was articulated by J. L. Austin (1961). Basically it requires a familiarity with ordinary language. Examples are drawn from ordinary discourse and analyzed using contextual clues to derive basic meanings associated with a particular usage. By compiling a wide range of examples from common usage and analyzing these, some basic or underlying commonalities can be articulated. Grouping examples according to a predetermined criterion can facilitate the analysis and point out more clearly certain distinctions contained within a given area of usage, thus allowing comparisons across areas of usage.

The specific procedure utilized in this study was as follows:

(1) Compile as many examples as possible which contain the root term involve, or one of its derivatives.

(2) Group the examples into general areas of usage using as the criterion the sentence structure usage, i.e., adjective predicate, etc.

(3) Subgroup a major area of usage if a variety of sentence structures is found, i.e., predicates into transitive and intransitive verbs.

(4) Subgroup again if necessary to isolate specific uses with a subgroup, i.e., intransitive verb forms into types of prepositional phrases used--with, in.

(5) Develop a model for each group or sub-grouping devised, i.e., X involves Y, X is involved with Y, X is involved in Y.

(6) Take each model developed and compare the basic meanings derived from context clues with terms which approximate the root term or its derivative. If ambiguity exists, so note it and make further comparisons to clarify the source of that ambiguity.

(7) Synthesize the major meanings for each model and point up existing sources of ambiguity associated with each model.

In essence, this is the linguistic analysis procedure. By clarifying how the term is used, and in what manner, a greater depth of understanding of the various meanings associated with each usage area can be gained.

A second analysis of the root term involve and its derivatives was initiated to determine the clarity of meanings associated with the various usage areas in the literature of program development in adult education (possibly a more technical usage). The literature was gleaned for examples and the results grouped according to the models developed previously in the linguistic analysis. The meanings derived from the context of the examples were compared with those found in ordinary language.

The findings of the linquistic analysis of ordinary language usage and in the special area of program development provided the basis for determining the content validity of internal consistency of the concept (Brodbeck's meaning of the concept).

To provide data to determine the external validity or the relational character of the concept, a review of empirical research which contained the concept as an independent variable was undertaken to develop trends of usage. These trends were analyzed both on quantitative and qualitative criteria. The procedure used for the grouping and testing process will be described next.

As will be noted later in the summary, two major senses of involvement were isolated in the linquistic analysis. These have been termed the minimal sense and the strong sense. The minimal sense denotes some sense of participation in a physical or cognitive activity or action. The strong sense denotes some sense of an affective characteristic--an interest, a concern, or a commitment.

The review of empirical research in the behavioral sciences revealed that the minimal sense of the concept involvement was widely used in empirical relationships as the independent or predictor variable. Relevant research studies were grouped by common criterion variables and a trend, in the form of a directional hypothesis, was established and tested. The grouped studies were analyzed as to whether they supported the directional hypothesis or not. The research designs employed by the studies were analyzed to ascertain the degree of confidence which could be placed in the findings based on Stanley and Campbell's criteria (Gage,1963). Based on the quantitative and qualitative criteria, a determination was made of each trend's validity. If the trend was validated, a certain degree of Brodbeck's "significance" could be inferred for the appropriate sense of the concept involvement.

RESEARCH PROBLEMS

One of the major problems both in the ordinary language analysis and the trend analysis was that of "completeness." To what extent had relevant examples or ordinary language been representative of the total population of the usage areas? In the trend analysis, to what extent had the universe of research studies been tapped, particularly since quantitative measures were instrumental in determining the external validity of the trends?

A second problem area centered around the qualitative criterion for validating the various trends. Did the researchers employ good design methodology in the planning and execution of their studies, but fail to reflect this in their report? If this indeed happened, then several studies evaluated on existing data concerning the studies would have to be re-evaluated based on later input. If a substantial number of these studies fell into this category, then the effect might drastically

affect the validating findings of one or more of the trends.

RESULTS

An analysis of the root word involve revealed several usage forms found in ordinary language. The adjectival form, "involved," most generally was equivalent to "complex" or "difficult," i.e., "This certainly is involved, isn't it?" In the predicate form, two major categories were discovered. Sentence structure provided a clue to the interpretation of the meanings. In the transitive verb form, two uses were noted under the appearance of the formula X involves Y. In cases when the X was non-personal, the meaning became somewhat equivalent to "includes," is subsumed under," or "is comprised of," i.e., "This process involves several steps." Where X was a person, the meaning was extended beyond "includes," etc. to something akin to "implicate" or "entangle," i.e., "He involved several others."

The second major predicate category identified was the intransitive form. Two sub-categories were evident from general usage and differentiated by the form of the prepositional phrase--X is involved with Y, and X is involved in Y. The former formula carried with it strong connotations of emotional entanglement, i.e., "He's really involved with her." A slight modification to this formula removed the necessity of the affective character of the relationship. Thus, X is involved with Y as a Z, allowed a greater range of meaning; i.e., "He's involved with her as a panel member (or on the panel)." The emphasis of the relationship then moved from a strong emotional nature to one of a sense of participation and/or interest in the activities surrounding the stated role (Z).

The latter form of this category X is involved in Y, proved to be most common in ordinary language usage. The X was generally found to be a person or agent. The Y was shown to be of an inclusive nature also--varying from an object to a situation or activity. Two general senses of the concept were noted as a result of this phase of the analysis. The first sense connoted a rather nebulous meaning of participation, i.e., "He is involved in a race," or "He's involved in studying for a test." This sense was equivalent to X "is participating in" or "is engaged in" certain activities. A further sense was derived from the analysis--one which connoted more than just "participation" or "engagement." This meaning connoted some degree of interest or concern in the situation or activity (an affective quality). Ordinary language instances often allowed a great latitude in the interpretation of the sense or senses of the concept intended for any particular utterance. Contextual factors generally provided some indicators for the derivation of more precise distinctions between the two senses of the concept. Expanding the original formula X is involved in Y to X is involved in Y as a Z facilitated further specificity of X's involvement in Y. Thus, "He's involved in the cancer crusade," expanded to "He's involved in the cancer crusade as a promoter," provided a more substantial basis for determining what sense(s) was (were) intended by the speaker.

To provide further clarification to the concept involvement, the literature surrounding one interest area in the field of adult education (the program planning process) was reviewed. This area was chosen for investigation because of the concept involvement's theoretical centrality in the program planning process. A review of relevant sources revealed that uses specific to this area generally could be categorized into two of the usage areas articulated in the ordinary language analysis.

A noticeable lack of the adjectival form and one predicate form, X is involved with Y, was noted. The majority of instances fell into one of two types--designated Type I usages; the latter Type II usages. With but few exceptions, Type I usages conformed to the meanings established previously in the ordinary language analysis, i.e., X involves Y is generally equivalent to "includes," "is comprised of," "is composed of," "consists of," or "is associated with."

The Type II usages, X is involved in Y, and its derivative, X is involved in Y as a Z, were also found to correspond to the general meanings established in the ordinary language analysis. The major senses of the term, i.e., the minimal sense (participation in physical or cognitive activities), and the strong sense (an affective characteristic) were found in the analysis. A certain degree of ambiguity existed in many examples due to a lack of contextual clues; a situation not unlike that found in ordinary language. Thus, for these examples, the precise meaning intended by the author could not be derived. The majority of Type II usages revealed the minimal sense of the term (participation in activities surrounding the planning process). In a few instances, the authors described the strong sense of the concept. Kidd (1963), used the synonym "engagement" to connote not just participation but a sense of commitment or concern. Jensen (1964), in discussing the learning situation, described psychological involvement with its emotional and cognitive bases. Ingham (1968), referred to Etzioni's definition of the meaning of "involvement"--an emotional orientation of varying intensity and direction. Therefore for some authors, the distinction between the senses of involvement were made clearer than in most studies. One further note of significance seemed appropriate.

In some instances cited in the chapter it appeared that some of the authors were operating on an implicit assumption, i.e., the minimal sense of the involvement promoted the strong sense of involvement. This was identified as a hypothesis; the validity of which was ascertained in the chapter devoted to the analysis of empirical research.

External Validity of the concept Involvement

. A review of empirical research conducted in the behavioral sciences revealed that the minimal sense of the concept involvement was widely utilized in the empirical relationships. These instances of usage were classified by the criterion measures used in the stated hypotheses. Four general areas of criterion measures were found--acquisition of information, affective changes, behavioral changes, and the development of certain abilities. Hypotheses were established for each category of dependent variable. The studies were analyzed to determine whether they supported the hypothesis or rejected it. A further refinement technique, research design analysis, was employed to ascertain the degree of confidence which could be placed in the findings. Sources of possible invalidity (both internal and external) were noted and discussed. The results of these analyses provided the basis for determining the validity of each of the hypotheses. Therefore, for each particular hypothesis, a determination was made as to the hypothesis' validity and the degree to which significance for the appropriate sense of the concept could be inferred from the validation findings.

The results of the validation procedures employed for each hypothesis stated indicated the following:

> Hypothesis 1. Increasing the degeee of subject involvement in classroom or group activities will result in greater acquisition of information .

This hypothesis was rejected; therefore no significance was assigned to the minimal sense of involvement in this context.

Hypothesis 2A. Increasing the degree of subject involvement in classroom or group activities will result in positive attitudinal changes being demonstrated by the participants.

The validity of this hypothesis received tentative support from the studies cited; therefore tentative significance was inferred for the minimal sense of involvement in this context.

Hypothesis 2B. Increasing the degree of subject involvement in classroom or group activity will result in greater satisfaction, group morale and cohesion.

The validity of this hypothesis received tentative support from the studies cited; therefore tentative significance was inferred for the minimal sense of involvement in this context.

Hypothesis 2C. Conditions which provide for greater subject involvement in group activities will result in more opinion change than under conditions of lesser involvement.

The validity of this hypothesis received support from the studies cited; therefore significance was inferred for the minimal sense of involvement in this context.

Hypothesis 3. Conditions which provide for greater subject involvement in group activities will result in more desired behavioral changes than under conditions of lesser involvement.

The validity of this hypothesis received tentative support from the studies cited; therefore tentative significance was inferred for the minimal sense of involvement in this context.

Hypothesis 4. Conditions which provide for greater subject involvement in group activities will result in greater development of certain abilities than under conditions of lesser involvement.

The validity for this hypothesis received tentative support from the studies cited; therefore tentative significance was inferred for the minimal sense of involvement in this context.

Hypothesis 5. Participant involvement in a situation or an activity will promote affective involvement in that situation or activity.

The validity of this hypothesis received tentative support from the studies cited; therefore tentative significance was inferred for the minimal sense of involvement in this context.

Hypothesis 5 was established to provide data on an implicit assumption identified earlier. The results, as noted above, assigned tentative validity to the hypothesis and allowed a certain degree of significance to be inferred for the minimal sense of the concept involvement as related to the strong sense of involvement.

Conclusions

Ordinary language analysis is a useful technique for exploring relevant concepts and for establishing a foundation for conducting an analysis of specific areas of usage.

The ambiguity surrounding the concept involvement stems partly from the range of meanings which have come to be associated with the term and partly from individual usage habits which emphasize only selected uses while disregarding the total range of possibilities.

The literature of adult education likewise displays a certain degree of ambiguity in the usage of the concept involvement. Several authors have attempted to rectify this situation by clarifying the various meanings which seem appropriate to their writings while others seem to assume that the meaning intended by them will be the meaning received by others. In most instances of the latter situation, contextual factors provide some degree of clarity, but often not to the extent required for clear meanings.

Instances of the minimal sense of the concept involvement have appeared most frequently in empirical research in the behavioral sciences. This is probably the case because of the investigator's greater facility in operationalizing the minimal sense of the concept. Extra-personal

situations are generally more easily established or controlled by an experimenter than are intra-personal processes. Validation procedures are more easily attained because of use of empirical measures (the observability factor of participation behavior).

Empirical findings have been shown to display certain inconsistencies in resluts. Each generalized trend noted earlier reflected certain results which tended to reject the postulated relationship. Several explanations seem plausible. Operationalized variables may not have been equivalent, even though they appeared so. Treatment conditions may not have been equally operative in equivalent studies, thus accounting for differential effects. Certain treatment conditions may have been more effective with certain treatment populations than with others. Other factors not articulated or considered by investigators could have affected the results, thus allowing a possible confounding of effects.

The hypotheses generated to guide the investigation of empirical research have provided the means through which significance for involvement could be inferred, assuming the hypotheses were validated. However, this significance extended only to the minimal sense, with the exception of Hypothesis 5 which related the minimal and strong senses of the concept. The inclusion of several hypotheses which were tentatively supported allowed the scope of significance to be expanded. Thus, a greater range of prediction and explanation is possible bacause of this investigation when relating at least one sense (minimal) of involvement to other variables.

Another conclusion which seems relevant is that the minimal sense of involvement has been operationalized in many forms under the general heading participation. This term did not signify one type of activity, but many activities subsumed under a single category (a Ryleian notion).

Finally, it appears that many authors and researchers, particularly in the field of adult education, have not generally understood the distinction between the senses of involvement. They have generally operated on the assumption that the concept possessed a unitary character, and that this characteristic could be applied (in the form of principles) as if it had been fully validated.

A general conclusion which seems most appropriate is that this study represents only an initial step in clarifying the foundation and mechanism of involvement. Further investigation is required to probe more deeply into the subtleties of the phenomenon and its relationships with other central concepts in the field of adult education. Some direction for these inquiries will be provided in the following section.

Implications

Several implications for the adult educator as theoretician seem to emanate from this study. First, by utilizing the findings of this analysis, theorists are provided another means of making their discussions about relevant concerns more comprehensible to themselves and to readers of their scholarly endeavors. The conclusion of this study that misunderstanding about the senses of involvement is prevalent among authors in the field should provide the impetus to further clarify the concept. Likewise, the knowledge that mis-understanding can creep into various terms commonly used in scholarly discourse, should provide the impetus to anticipate such sources of ambiguity and eliminate them before the fact.

Secondly, the finding that a range of meanings exists for the concept involvement should lead to a possible expansion of theoretical considerations. Even though the two major senses of the concept have been identified, further inquiry is needed into both senses. Such questions as the following might be raised and deserve attention. Is participation a necessary factor in arousing a certain concern or interest in an activity object or situation? Is gross participation sufficient to promote affective changes? Do all types of participation yield equivalent results in terms of affective and behavioral change? In the relationship between participation and various criterion measures, can an intervening variable (possibly personal relevance) be postulated as an operating variable? That is, participation effects certain changes only if the participants perceive their participation as personally relevant. This latter notion is highly suggestive of the role of motivation in effecting changes.

By investigating such inquiries as those cited above, the scope of interrelationships can be expanded, and hopefully understood better. Therefore, knowledge is expanded in one or more areas of inquiry.

Finally, it seems that this study could serve as a guideline for the analysis of other concepts which have proven to be in need of clarification.

In addition to being of value to the theoretician, the results of this study speak to the adult educator as a researcher. The analysis of a concept can provide more fertile ground for the researcher in determining relevant relationships which might speak to his particular concerns. Not only is the range of possible relationships widened, but the analysis provides some guidance in distinguishing between various meanings and possible ways of operationalizing them. This study, by including the report of

empirical research which utilized involvement in one sense or another, can assist the researcher in determining what has been done previously, the results of such efforts, and possible areas of difficulty encountered by the investigators. This study likewise should alert the researcher to the fact that the expansion of knowledge about certain relationships in not only a function of clear and precise concepts, but also a function of the appropriate design employed which will ensure confidence in the findings of certain hypothesized relationships. Therefore, the implications for the researcher center on providing a greater range of hypotheses associated with a particular concept, the facilitation of operationalizing these concepts, and the design considerations which can affect the confidence and the validity of the findings in the expansion of knowledge.

The impact of this study for the practitioner in the field focuses on providing a greater understanding of a phenomenon central to many practices in adult education. The analysis not only provides a cognitive base to facilitate a deeper comprehension of the concept but also a basis for implementation in the field. The results of the various trends in research revolving around the concept involvement can be considered as potential criteria in the selection of certain techniques to achieve certain goals. The intuitive notion prevalent in adult education that "participation is good," or that democratic values held by society dictate "maximum involvement by participants of adult programs," can be legitimized to some extent by empirical findings revealed in this study which tend to support these notions in certain areas of concern.

A final implication which is applicable to all professional adult educators seems appropriate. This study should provide the impetus for further analysis of the theoretical and empirical foundations of certain widely accepted principles which are instrumental in affecting practice in the field of adult education.

REFERENCES

Austin, J. L. Philosophical papers. London: Oxford University Press, 1961.

Gage, N. L. (Ed.). Handbook of research on teaching. Chicago: Rand McNally & Company, 1963.

Gagne, R. M. The conditions of learning. Chicago: Holt, Rinehart, & Winston, Inc., 1965.

Kidd, J. R. How adults learn. New York: Association Press, 1963.

Peters, R. S. (Ed.). Concept of education. New York: The Humanities Press, 1967.

ARTICLES

Ingham, R. J. A comparative study of administrative principles and practice in adult education units. Adult Education. 1968, 19, 52-68.

Jensen, G. Learning how to learn. Teacher Education Roundup. 1969, 17, 3-4.

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